

ABSTRACT OF THE DISCLOSURE

A biosensor protein comprising (1) and (2) below:

- (1) a modified fluorescent protein which is obtained by cleaving amino acid sequence of green fluorescent protein or its derivative in the vicinity of a hotspot amino acid residue which affects the fluorescence property, and modifying the structure of the green fluorescent protein or its derivative, and (2) one or more functional molecules which are capable of transmitting their conformational changes to the modified fluorescent protein to cause a conformational change of the modified fluorescent protein, thereby altering the fluorescence property of the modified fluorescent protein.